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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/511,895

10/20/2004

David Burnet Sugden

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EXAMINER

SINGH, SUNIL

ART UNIT

PAPER NUMBER

3673

MAIL DATE

DELIVERY MODE

07/16/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/511,895	Applicant(s) SUGDEN, DAVID BURNET	
	Examiner Sunil Singh	Art Unit 3673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 5-7, 17-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Wipo (WO 00/46486).

Wipo '486 discloses an oscillating disc cutter (10) including a cutting disc (12,602) and a drive mechanism (20), the drive mechanism including a drive shaft (18,19,612, see abstract, pages 2,4,10) to effect eccentric oscillation of the cutting disc and a radial bearing (15,23,609,610,see Figs. 1 and 7, disposed to permit relative rotation between the drive shaft and the cutting disc, the cutter further including a first axial friction bearing (606) disposed to react axial forces while accommodating induced rotation of the cutting disc when operatively engaged and to induce a rotational drag thereby limiting rotational speed of the cutting disc when free running; a second bearing (605) to induce a predetermined axial load in the first bearing.

With regards to claims 17-20, the drag is controlled by the pressurizing of members 605,606.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4,8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO '486 in view of Cooper or Arvidsson (US 3332726, 5202937) or EP document (EP 0618377).

WO' 486 discloses the invention substantially as claimed. However, WO '486 lacks a first bearing being oil operated. Cooper, Arvidsson and EP '377 document all teach a first bearing being oil operated (27,34; 12,13; 13,14,21,22,49,50,45,46). It would have been considered obvious to one of ordinary skill in the art to modify WO '486 to make the first bearing oil operated as taught by either Cooper or Arvidsson or EP '377 document in order to allow the bearings to operate effectively at slow speeds as well as variable high speeds.

5. Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO '486.

WO' 486 discloses the invention substantially as claimed. However, WO '486 is silent about the rpm when free running. It would have been considered obvious to one of ordinary skill in the art to modify WO '486 to have the rpm as called for in claims 14-16 since such rpm can be controlled by the drive means. Such a modification is a mere design choice.

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6. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO '486 in view of Cooper or Arvidsson (US 3332726, 5202937) or EP document (EP 0618377).

WO' 486 discloses the invention substantially as claimed. However, WO '486 lacks a first bearing being oil operated. Cooper, Arvidsson and EP '377 document all teach a first bearing being oil operated (27,34; 12,13; 13,14,21,22,49,50,45,46). It would have been considered obvious to one of ordinary skill in the art to modify WO '486 to make the first bearing oil operated as taught by either Cooper or Arvidsson or EP '377 document in order to allow the bearings to operate effectively at slow speeds as well as variable high speeds.

With regards to claims 14-16, it would have been considered obvious to one of ordinary skill in the art to modify WO '486 to have the rpm as called for in claims 14-16 since such rpm can be controlled by the drive means. Such a modification is a mere design choice.

With regards to claims 17-20, the drag is controlled by the pressurizing of the bearing members.

Response to Arguments

7. Applicant's arguments filed 4/11/07 have been fully considered but they are not persuasive. Applicant argues that WO '486 does not teach a first axial friction bearing. The examiner disagrees. It should be noted that water lubricated bearing (606) serve as a friction bearing structure and thus the intended effects are realized. There is no evidence to the contrary. The water lubricated bearing (606) will cause rotational drag

contrary to applicant's assertion. Applicant's argument that his invention lack "mechanical linkage" is far more limiting than the claimed subject matter. There is no limitation in the claims precluding having "mechanical linkage".

8. In response to applicant's argument that it is not obvious to modify Wo '486 by making the first bearing oil operated as taught by either Cooper or Arvidsson or EP '377 since such a modification withstands axial loading while allowing the bearings to operate effectively at slow speeds as well as variable high speeds, wherein his invention is designed to prevent over-speeding of the disc when it is free running, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunil Singh whose telephone number is (571) 272-7051. The examiner can normally be reached on Monday through Friday 10:30 AM - 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Engle Patricia can be reached on (571) 272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Sunil Singh
Primary Examiner
Art Unit 3673



SS


7/6/07